

gulls in Kerala.

On 11 March 1991, a flock of five flamingos *Phoenicopterus roseus* was found feeding in the shallow waters of the estuary. All the birds appeared to be immatures. They were all greyish with a little pink daubed on the back. The head and neck were greyish brown. In flight, the primaries and the trailing edges of the wings were black. The bill was sharply downcurved and black-tipped. The rest of the mandibles were horn coloured; and the legs,

pinkish. The birds were standing in knee-deep water engaged in their characteristic feeding movements for sifting brine. They did not appear to be too wary of our approaching canoe but only walked away. Local enquiries indicated that the five birds had been there from about the middle of January.

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December 24, 1991
C. MOHAN KUMAR

5. A VISIT TO THE 'FLAMINGO CITY' IN THE GREAT RANN OF KUTCH, GUJARAT

In his excellent notes on the breeding of the flamingos *Phoenicopterus roseus* and *Phoeniconaias minor*, Dr. Salim Ali has fully described the conditions in the Great Rann, the rivers flowing into it etc. Without repeating the details, it may be mentioned here that conditions recently were similar to those described by him (*JBNHS 71 (I): 141-144, 1974*). Since Salim Ali first described his visit in the year 1945 (*JBNHS 45: 586-593*) conditions in the Rann, particularly the water regime, have undergone a change. This is mainly owing to the damming of the rivers and rivulets flowing into the area. The inflow of water from river Luni (Rajasthan) and also from the Banas (N. Gujarat) is far less since dams have been built on them. In the beginning of the 1990 monsoon season extremely heavy rain fell in north Gujarat and in Barmer district of Rajasthan due to which the dams on those rivers overflowed, and continued to do so for a long time. Rain arrived late in Kutch (end August), but Pachham got very heavy rainfall, as a result of which plenty of water went into the Great Rann. Thus conditions for nest-building did not become suitable till about November 1990.

During my birdwatching trips in Kutch during the 1989-90 winter I noticed a near complete absence of the greater flamingo in their usual haunts, along the sea coast, in tidal creeks and on inland collections of water. This was also observed by other birdwatchers in this district. So it was suspected that these birds may have congregated in the Rann.

Thus to investigate whether the flamingo had actually collected in the Great Rann of Kutch it was necessary to pay a visit there. I was fortunate in succeeding to persuade the Forest Department of the district to undertake a survey. So along with A.C. Patel, Assistant Conservator of Forests, Bhuj, two Forest

Guards and a Ranger, I set out for the well known 'Flamingo City' on 7 January 1991. Camels were locally hired at Tugga village to take us to Nir, a former outpost of the erstwhile Kutch State Police, now manned by the B.S.F., and the entry-point for the Rann in the north of Pachham Island. After about a 14 km journey we made a night halt at Nir. The winter morning of 8 January was very clear with good visibility. We could see flamingo at a distance as a thin white line from Nir itself.

The final stretch of about 8 km from Nir through the slush and water, from 60 cm to about 1.3 m deep, in the Rann took us nearly five hours with the camels wading through water and slithering in the slippery mud. We reached the 'Flamingo City' around 1430 hrs. We took a rough count of the birds with the help of binoculars. Our estimate was that there were 25,000 to 30,000 adults, between 10,000 and 15,000 young, ranging in age from newly hatched to a fortnight old and several nests containing one egg each. Our first impression was that there could not have been less than 12,000 nests, some of them perhaps unoccupied, while there may have been others left over from a previous year's breeding attempt. Actually the colony is in two sections with some clusters of nests having empty spaces in between, making the estimation of their numbers rather tricky; and this would also apply to the calculation of the number of the flamingo. Besides this, the haze caused by the afternoon sun adds to the difficulty. We had already spent about 2 1/2 hours there; not wanting to unduly disturb the breeding birds and we began our return journey to Nir. As we left, we could look back to see the adult flamingo starting to come back to their eggs and young.

Not having been satisfied with the rough

TABLE 1
NEST COUNTS IN ARBITRARILY DEMARCATED AREAS

Area	No. of nests	No. of eggs
6.5 x 20m	352	56
4 x 3 m	55	1
3 x 3.3 m	27	1
4 x 4 m	108	3
13.2 x 20 m	450	128
5 x 15m	186	36
16 x 16 m	436	208
5 x 8.2 m	207	58
Total	1821	491

counts, particularly of the nests, I paid a second visit to the flamingo colony on 30 January 1991. This time an attempt was made to take a sample count of the nests covering approximately one-sixth of the area of the colony. The area was roughly divided into sections, as shown in Table 1.

I did not take a count of chicks, for there were just a few in the nest, and those which could walk herded together and moved too far away, making it impossible to count them.

March 13, 1991.

NAVIN N. BAPAT

6. BRAHMINY KITE *HALIASTUR INDUS* (BODDAERT) PREYING ON BATS

The brahminy kite *Haliaeetus indus* is mostly regarded as a scavenger, feeding chiefly on dead or dying fish. Its diet is reported to include crabs, frogs, small lizards, snakes, young or sickly birds, insects (mainly termites and grasshoppers) and mice. An attack on a hare is mentioned in *HAND BOOK OF THE BIRDS OF INDIA AND PAKISTAN*, Ali S. and Ripley, S.D. 1983.

We recorded a case of brahminy kite preying on bats at Vedaranyam, 11 km from the Point Calimere Wildlife and Bird Sanctuary in Tanjore district, Tamil Nadu. At Vedaranyam, an old dilapidated structure housing a chariot of the Vedaranyeshwar temple, harbours a huge colony of insectivorous bats. After sunset, there is a stream of bats flying out of the building. On 14 August 1990, we noticed a brahminy

kite making circles and trying to catch bats without success. During our second visit a few days later, a brahminy kite was again unsuccessfully attempting to catch bats. At the same time we saw a shikra or sparrow hawk (?) (*Accipiter* sp.) catch a bat. On our third visit on 24 August 1990 we saw two brahminy kites hunting for bats, of which one was successful. On capture, it pecked at the shrieking victim to kill it and then flew to feed on a nearby coconut tree. These observations show that the brahminy kite is also an active predator of fast moving prey, and bats form part of its diet.

January 7, 1991

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7. SURGERY OF A RARE KIND

On 11 March 1990 two young Bonelli's eagles *Hieraaetus fasciatus* were found at Galavde wadi near Indapur, Maharashtra. One of them had a fracture on its left leg. Most probably this could have been due to the injury sustained by the bird when their nest was destroyed by local people. X-rays were taken and it was found that the tibiotarsus was fractured and there was one centimetre of overriding. If only plaster was used the eagle would have been left with a shortened and weak leg. As eagles kill their prey with their talons and strong legs are necessary it was decided to operate on the eagle's leg. The eagle was operated under local anaesthesia as this was

found to be the safest. A lateral approach was taken and the bones were reduced and fixed with a plate and four screws. An intra medullary rod was put as an additional support. The screws and plate used were made of special American steel which does not react and is used in human finger operations.

It was noted that the tibiotarsus of the leg bones of a bird has a thin cortex. This is because the bones should be light in weight to facilitate flight. The medullary cavity is very broad. The bone is flat anteroposteriorly.

The muscles of the leg are extremely strong and are grouped in anterior and posterior groups to enable